REMARKS

Claims 1-10 remain in the application.

Claims 1-3 are herein amended.

In Item 4 of the Office action, the Examiner provides reasons for the rejection of claims 2 and 3 under 35 USC 112. Appropriate amendments are made to claims 2 and 3 to overcome these rejections.

In Item 2 of the Office action, the Examiner provides a response to arguments in which the Examiner identifies excerpts from Sati that would seemingly teach the subject matter of claim 1.

Firstly, while not admitting the appropriateness of the 35 USC 102(e) rejection in terms of dates of invention, the Applicant provides arguments below relative to the response to arguments to advance prosecution.

The present application pertains to determining how an implant will be positioned in a femur, **while** the femur is being rasped, and **prior** to the insertion of the implant. Accordingly, an operator can be guided during the rasping, as opposed to prior art trial-and-error methods, by which the operator would assess the insertion while pausing from rasping.

This is possible by the real-time tracking of the rasp relative to the femur while altering the femur, and by knowing the 3D geometry of the rasp and of the implant. The method keeps track of the **three-dimensional geometry of the alteration**, and may thus determine how the implant would fit in the cavity rasped in the femur, i.e., the alteration.

The Examiner identifies paragraph 52 of Sati relative to the use of 3D models of instruments in implants in computer assisted surgery. However, the last two sentences of paragraph 52 of Sati pertain to the contemplated use of the 3D models in Sati, namely to produce a dynamic 2D projection. It is stated in the last sentence of the paragraph 52 that as *"the steps of the procedure are simulated, datums or references may be recorded on the image to assist in the subsequent procedure."* There is no discussion about predicting the implant insertion at this point. Moreover, the fact that the 3D models are projected onto a 2D image would cause a lack of precision in determining the implant insertion. In paragraph 52, Sati fails to teach using 3D models of the implant and instruments to calculate the insertion.

Thereafter, the Examiner identifies paragraph 79 as teaching the other part of the claim, namely calculating parameters of insertion by the tracking of the tool. However, paragraph 79 is to be read with paragraphs 77 and 78 of Sati, setting forth a sequence of steps to calculate the leg length. Leg length, as described by Sati, is done in a two-dimensional environment, namely the frontal plane. This is consistent with paragraph 52 in that Sati limits his teaching to operating in two-dimensional images.

Moreover, paragraph 79 pertains to calculating parameters relative to the position of the **reamer**. It is one thing to track a rasp in 3D to obtain calculate alterations for fitting of a 3D model of an implant as claim 1 teaches; it is another to simply track a **reamer** for **position**, as specifically mentioned in Sati.

Therefore, Sati fails to teach determining the current implant insertion by the real-time tracking of a rasp to calculate three-dimensional alterations made to a femur.

In view of the above amendments and remarks, this application is considered to be in condition for allowance, and early notice to that effect is earnestly solicited.

Respectfully submitted,
Herbert Andre Jansen et al.
By:

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(Date)

/Pierre T. A.-NGUYEN/
Pierre T. A.-NGUYEN (Reg. No. 55,043)
Agent of Record
NORTON ROSE OR LLP
1 Place Ville Marie, Suite 2500
Montreal, Quebec, Canada H3B 1R1
Tel.: (514)847-4243